



igScript™ First Strand cDNA Synthesis Kit

Manual

Catalog #	4312	4314
Package Size	25 reactions	100 reactions



Important!

-20°C Storage Required

- * Immediately inspect packages
- * Freeze upon receipt



visit us online for more
products & custom services

Intact Genomics, Inc.

Table of Contents

Product Description.....	3
Applications.....	3
Benefits.....	3
Product Components.....	3
Storage.....	3
Protocol.....	4
Related Products.....	5
Ordering Information.....	5
Technical Support.....	6

Description:

igScript™ First Strand cDNA synthesis kit includes 5x igScript™ Master Mix which contains igScript™ Reverse Transcriptase, recombinant RNase inhibitor, dNTPs, an optimized buffer, MgCl₂ and protein stabilizers. igScript™ Reverse Transcriptase is a recombinant MMLV reverse transcriptase with reduced RNase H activity and increased thermostability. The kit also provides two optimized primers and nuclease-free water. An anchored Oligo-dT primer [d(T)₂₃VN] forces the primer to anneal to the beginning of the polyA tail and the random hexamer primer mix provides random and consistent priming sites covering the entire RNA templates including both mRNAs and non-polyadenylated RNAs. The kit is highly efficient at producing full-length cDNA from long RNA templates at temperatures between 42-55 °C.

Applications:

- First strand cDNA synthesis for PCR or RT-PCR
- Gene expression data validation by using RT-PCR

Benefits:

- Active at temperatures up to 55° C.
- Highly efficient at producing full-length cDNA from as little as 50 pg of total RNA.

Product Components:

- 5x igScript™ Master Mix
- Oligo d(T)₂₃ VN primer (50 µM)
- Random hexamer primer mix (60 µM)
- Nuclease-free water

Storage Temperature:

-20 °C

First Strand cDNA Synthesis Protocol:

1. In a sterile micro-centrifuge tube, add the following components on ice:

Component	Volume
Total RNA	Up to 1.0 µg
5x igScript™ Master Mix	4.0 µl
Primer: d(T) ₂₃ VN (50 µM) and/or random primer mix (60 µM) or	2.0 µl
Nuclease free H ₂ O	Up to 20.0 µl

2. If using random hexamers, incubate the reaction mixture at 25°C for 10 minutes, then proceed to step 3.
3. Incubate the reaction mixture at temperatures between 42°C to 55°C for 30-60 minutes.
4. Inactivate the reaction by incubating at 65°C for 20 minutes.
5. Proceed to PCR amplification step.

Related Products:

- igScript™ One Step RT-qPCR Kit (Cat.# 4214)
- igScript™ Reverse Transcriptase (Cat.# 3344)
- igScript™ Probe Based One Step RT-qPCR Kit (Cat.# 4212)
- ig® SYBR Green qPCR 2x Master Mix (Cat.# 3354)

Ordering Information:

- Order online within the USA. Place orders on **www.intactgenomics.com** using our secure Shopping Cart.
- Order by email, phone, or fax.
Email: **sales@intactgenomics.com**
Phone: (314) 942-3655 | Toll-free : 855-835-7172 | Fax: (314) 942-3656
- Order via our distributors.

Intact Genomics owns the following registered trademarks granted by the United States Patent and Trademark Office (USPTO): Intact Genomics®, IG®, ig®, igTherapeutics®, FastAmp®, i7®, DirectPlate®.

All technology protocols discussed within this manual are assumed proprietary to Intact Genomics. This Product may be covered by pending or issued patents or may have certain limitations. Please contact us for more information. Purchase of this material conveys to buyer the non-transferable right to use the material purchased in research conducted by buyer, whether for teaching, non-commercial or commercial research purposes. Buyer may not sell or otherwise transfer these materials, its components, or unmodified descendants to a third party.

Product Use Limitation and Disclaimers

This product is for research purposes only. It is not intended for therapeutic or diagnostic purposes in humans or animals. This product contains chemicals which may be harmful if misused or direct human contact is made.

Intact Genomics is dedicated to practicing and maintaining science and technology ethics. Buyer agrees to use the purchased materials in full compliance with applicable law and regulations.

Technical Support & Customer Services

Intact Genomics (IG®) is dedicated to customer satisfaction regarding the use of our products for your research needs. Each new lot of our products is thoroughly tested to ensure it meets high quality standards and provides excellent results. We appreciate your business and your feedback regarding the performance of our products in your applications. Please follow the instructions carefully and contact us if additional assistance is needed.

Our hours are Monday - Friday, 8AM to 5PM, U.S. Central Standard Time.

Intact Genomics, Inc.

11840 Westline Industrial Drive, Suite 120,
St. Louis, MO. 63146, USA

Phone: (314) 942-3655 | **Toll-free :** 855-835-7172 | **Fax:** (314) 942-3656

Email: sales@intactgenomics.com | ig@intactgenomics.com

Website: www.intactgenomics.com

© 2024 Intact Genomics, Inc
All Rights Reserved

